$$\begin{bmatrix} O & PO_3H_2 \\ PO_3H_3 \\ PO_3H_3$$

wherein the secondary compound is: in a salt form.

## Embodiment 57

A method of preparing a dosage form for use in the treatment of a condition or disease related to bone, cancer, or pain, comprising removing a secondary compound from <sup>20</sup> a composition comprising zoledronic acid or a salt thereof;

wherein an amount of the secondary compound is determined before removing the secondary compound from the composition comprising zoledronic acid or a salt thereof;

$$\begin{bmatrix} O & PO_3H_2 \\ HO & OH \end{bmatrix}^+ \\ PO_3H_2 & PO_3H_2 \\ PO_3H_2 & PO_3H_2 \\ H_2O_3P & OH \end{bmatrix}^+$$

wherein the secondary compound is: in a salt form.

## **Embodiment 58**

The method of embodiment 55 or 56, wherein the amount of the secondary compound is determined to be greater than 0.1%.

## Embodiment 59

The method of embodiment 55 or 56, wherein the amount of the secondary compound is determined to be greater than 50 0.08%.

## Embodiment 60

A dosage form for use in the treatment of a condition or 55 disease related to bone, cancer, or pain, wherein the dosage form is prepared by the method of embodiment 55, 56, 57, 58, or 59.

Unless otherwise indicated, all numbers expressing quantities of ingredients, properties such as molecular weight, 60 reaction conditions, and so forth used in the specification and claims are to be understood in all instances as indicating both the exact values as shown and as being modified by the term "about." Accordingly, unless indicated to the contrary, the numerical parameters set forth in the specification and 65 attached claims are approximations that may vary depending upon the desired properties sought to be obtained. At the

very least, and not as an attempt to limit the application of the doctrine of equivalents to the scope of the claims, each numerical parameter should at least be construed in light of the number of reported significant digits and by applying ordinary rounding techniques.

The terms "a," "an," "the" and similar referents used in the context of describing the invention (especially in the context of the following claims) are to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., "such as") provided herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of any claim. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention

Groupings of alternative elements or embodiments disclosed herein are not to be construed as limitations. Each group member may be referred to and claimed individually or in any combination with other members of the group or other elements found herein. It is anticipated that one or more members of a group may be included in, or deleted from, a group for reasons of convenience and/or patentability. When any such inclusion or deletion occurs, the specification is deemed to contain the group as modified thus fulfilling the written description of all Markush groups used in the appended claims.

Certain embodiments are described herein, including the best mode known to the inventors for carrying out the invention. Of course, variations on these described embodiments will become apparent to those of ordinary skill in the art upon reading the foregoing description. The inventor expects skilled artisans to employ such variations as appropriate, and the inventors intend for the invention to be practiced otherwise than specifically described herein. Accordingly, the claims include all modifications and equivalents of the subject matter recited in the claims as permitted by applicable law. Moreover, any combination of the above-described elements in all possible variations thereof is contemplated unless otherwise indicated herein or otherwise clearly contradicted by context.

In closing, it is to be understood that the embodiments disclosed herein are illustrative of the principles of the claims. Other modifications that may be employed are within the scope of the claims. Thus, by way of example, but not of limitation, alternative embodiments may be utilized in accordance with the teachings herein. Accordingly, the claims are not limited to embodiments precisely as shown and described.

What is claimed is:

1. A method of treating arthritis comprising orally administering a dosage form to a mammal in need thereof, wherein the dosage form comprises:

$$(Compound\ A)$$

$$(A)$$

$$(A)$$